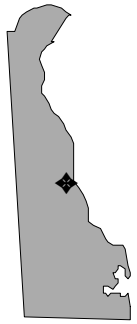
Dover Air Force Base NPL

Size: 3,730 acres
Mission: Provide airlift support for troops, cargo, and equipment
HRS Score: 35.89; placed on NPL in March 1989
IAG Status: Federal Facility Agreement signed in August 1989
Contaminants: Solvents, paints, petroleum products, VOCs, heavy metals, and plating wastes
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $38.6 million
Estimated Cost to Completion (Completion Year): $53.3 million (FY2011)
Final Remedy in Place or Response Complete Date for All Sites: FY2004



Dover, Delaware

Restoration Background

Since 1942, this base has provided airlift assistance for troops, cargo, and equipment. Former waste management practices contaminated the shallow groundwater aquifer with petroleum products, volatile organic compounds (VOCs), and heavy metals. The principal site types at the installation are underground storage tanks (USTs), oil-water separators, fire training areas, landfills, fuel spills and leaks, and a fuel hydrant system.

A Preliminary Assessment was completed in 1983 and a Site Inspection was completed in 1989. Fifty-nine restoration sites have been identified to date. Basewide Remedial Investigation and Feasibility Study (RI/FS) fieldwork was completed in FY94.

In FY95, the installation began pilot tests of innovative treatment technologies, funded by the Remediation Technology Development Forum (RTDF). Three Records of Decision (RODs) were signed, which incorporated the innovative treatment technologies into Remedial Actions (RAs). The installation also completed an RA at a former waste oil tank site, removed USTs from one site, and completed a Focused Feasibility Study.

In FY96, the installation conducted a natural attenuation project at four sites contaminated with chlorinated solvents. Corrective action plans were completed for six sites contaminated with petroleum. An Engineering Evaluation and Cost Analysis (EE/CA) was completed for excavation of a waste oil-contaminated soil source.

In FY97, basewide RIs were approved by state and federal regulators. Three innovative technology projects funded by RTDF continued. Three RODs were signed for natural attenuation at four sites. A Remedial Design characterization of a former fire training area was conducted by magnetic scanning and ground-penetrating radar. The installation characterized a source of pesticide soil contamination in the industrial area and completed an EE/CA for soil removal with an asphalt cap. Contracts were awarded for installation of two free-product recovery systems.

FY98 Restoration Progress

The installation completed construction of a free-product recovery system, which includes recovery wells, piping, and in-well skimmer pumps to extract spilled JP-4 jet fuel. A pesticide source excavation and asphalt capping project was initiated. This project is slightly behind schedule due to a delay in contracting.

Design and investigation of a former fire training area were completed. The installation also completed a drum removal action at the former fire training area, began fieldwork on an RA for removing two industrial waste basins, and began natural attenuation monitoring at three petroleum exclusion sites.

The soil excavation project was completed for a waste oil-contaminated area on the golf course. The project generated 1,935 tons of contaminated soil, which was shipped to a treatment and disposal facility. An RTDF-accelerated anaerobic bioremediation project was successful in the total cleanup of chlorinated solvent contamination in the pilot test cell. Complete dechlorination of contamination was seen in the test cell after bioaugmentation Plans to expand the project to clean up a larger contaminant plume are under way.

Basewide FSs were not completed as scheduled. The FSs are on hold pending regulator concurrence on the basewide Ecological Risk Assessment (ERA). A ROD to close out approximately 20 sites is also on hold pending regulator concurrence on the basewide ERA. The installation generated three RODs: two for natural attenuation of groundwater and one for excavation of industrial waste basins.

Plan of Action

- Complete construction of a second free-product recovery skimming project in FY99
- Complete FSs for active sites in FY99
- Generate ROD to close out approximately 20 sites in FY99
- Implement long-term operations at free-product recovery site in FY99
- Complete excavation of industrial waste basins and associated contaminated soil in FY99
- Implement natural attenuation monitoring projects at two sites in FY99

FY99 Funding by Phase and Relative Risk